Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Price Cap Performance Review for Local Exchange Carriers	)	CC Docket No. 94-1

FIRST REPORT AND ORDER

Adopted: March 30, 1995; Released: April 7, 1995

By the Commission: Commissioners Quello and Barrett issuing separate statements; Commissioner Ness dissenting; Commissioner Chong issuing a separate statement.

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I. INTRODUCTION AND EXECUTIVE SUMMARY

1. The price cap plan the Commission adopted in 1990 for local exchange carriers (LECs) is designed to mirror the efficiency incentives found in competitive markets, thus acting as a transitional regulatory scheme until the advent of actual competition makes price cap regulation unnecessary. It does this by encouraging LECs to move prices for interstate access services to economically efficient levels, to reduce costs, to invest efficiently in new plant and facilities, and to develop and deploy innovative service offerings. Under the existing plan, price cap indexes limit the maximum prices that LECs may charge for their interstate services. The indexes are adjusted each year in accordance with a formula that accounts for industry-wide changes in unit costs. The price cap plan rewards LECs that exceed the productivity target by permitting them to retain higher profits than they would be allowed to retain under rate-of-return regulation.

2. The price cap regulatory regime protects consumers by restricting the maximum prices that LECs may charge for interstate services. The current scheme, moreover, creates incentives for LECs to set prices for these services at lower, more efficient levels in order to generate greater usage of the telephone network. The performance of the interstate long distance industry over the past 10 years demonstrates that reducing the prices for telecommunications services to more economically efficient levels can have a dramatic impact on the demand for those services. For example, since 1984, decreases in the prices for interstate toll services caused by Federal Communications Commission reforms in the pricing of interstate access services and competition among long distance companies helped stimulate a 100 percent increase in interstate long distance calling.[1]

3. The price cap plan also creates incentives for LECs to invest efficiently in new facilities and to offer innovative services that will lead to increased usage of the telephone network. More efficient use of the nationwide telecommunications network contributes to economic growth by reducing the cost of telecommunications services that are used by other industries to produce goods and services. In addition, creating incentives for efficient investment and new service deployment allows market forces -- not regulation -- to determine the pace of infrastructure development.

4. With appropriate modifications, the current price cap system could facilitate the transition to competition in local

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[1] Statistics of Communications Common Carriers, 1993/1994 Federal Communications Commission 309 (1994).

telecommunications markets. The current price cap scheme is designed to maintain regulation of LEC interstate telecommunications services as long as regulation is needed to ensure that prices are just, reasonable and non-discriminatory. Our experience in regulating AT&T and the LECs under price caps shows that this regulatory regime does not hinder the development of competition for telecommunications services; rather, it is an appropriate transitional mechanism. The current LEC service baskets and pricing bands provide the carriers with greater flexibility in pricing their interstate access services than they possessed under rate-base/rate-of-return regulation. This flexibility gives the LECs the ability to adjust their prices to a limited extent in response to competitive entry. In this Order we increase that flexibility in significant ways. Finally, and most importantly, this price cap plan can be adapted as competitive markets develop for particular services. In the case of AT&T, for example, the emergence of competitive markets for specific interstate long distance services led us to remove those services from price cap regulation and subject them to streamlined regulation.[2]

5. We commenced this proceeding to undertake a comprehensive review of the performance of this LEC price cap plan over the past four years. The Notice of Proposed Rulemaking[3] issued in this docket invited comments on three broad categories of issues: (a) whether the principal policy goals of LEC price cap regulation should be modified; (b) whether changes to the existing regulatory system are warranted in light of the first four years of experience; and (c) whether adjustments to the scheme are needed to adapt the plan to changes in the marketplace, technology and regulation that may occur over the next few years.

6. Our request for comments on the various elements of our existing system of LEC price cap regulation elicited responses from a broad and diverse array of parties representing virtually every segment of the telecommunications industry, including LECs, interexchange carriers (IXCs), telecommunications user groups, and consumer groups. In addition to the extensive comments and reply comments that were submitted during the pleading cycle established in the Notice, we received numerous ex parte submissions. In many of these filings, particularly more recent ones, parties modified, in some cases significantly, the

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[2] Revisions to Price Cap Rules for AT&T, Report and Order, CC Docket No. 93-197, FCC No. 95-18 (released Jan. 12, 1995).

[3] Price Cap Performance Review for Local Exchange Carriers, Notice of Proposed Rulemaking, 9 FCC Rcd 1687 (1994) (Notice).

positions advanced in their original comments.[4]

7. In this Report and Order, we adopt interim LEC price cap rules that reflect our commitment to the policy objectives that guided our adoption of LEC price cap regulation almost five years ago. Specifically, these interim rules affirm the proposition that, in order to replicate the effects of a competitive market, LEC price cap regulation should create incentives for carriers to set prices for services at economically efficient levels, to offer new services that are responsive to consumer demand, and to invest in new facilities that are needed to provide service efficiently. Overall, this interim price cap plan should encourage LECs to make economic decisions that they would make if their markets were competitive. We believe that accomplishing this objective will ensure that prices for LEC interstate services are just, reasonable and non-discriminatory.

8. None of the commenting parties contends that we should repeal price cap regulation for the LECs and reinstate rate-of-return regulation. Rather, the parties devoted most of their attention to three principal aspects of our current regulatory regime: (a) whether we should modify or eliminate the sharing and low-end adjustment mechanisms; (b) whether we should make a one-time adjustment to the current price cap indexes or rates; and (c) what is the appropriate method for setting the annual productivity adjustment ("X-Factor").

9. The record in this proceeding contains two primary proposals for setting the X-Factor for now and for the future. The United States Telephone Association ("USTA"), a LEC trade association, urges us to set the X-Factor on the basis of the industry-wide total factor productivity (TFP) achieved by the price cap LECs. Further, USTA proposes that we compute and update the TFP annually on the basis of a moving five-year average of the industry-wide TFP. This would obviate the need for us to conduct periodic proceedings like this one to recalibrate the X-Factor.

10. AT&T, by contrast, contends that we should set the X-Factor by computing the average industry productivity gain on the basis of price cap LECs' interstate earnings. Specifically, AT&T recommends that we determine the LECs' efficiency growth by comparing average industry interstate earnings to the 11.25 percent rate of return that LEC rates were targeted to earn at the time that they became subject to price cap regulation. The resulting X-Factor would then be utilized until the next price

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[4] Appendix A lists all parties who have filed comments in this proceeding. The listing provides both the complete name and the abbreviated name, which is used throughout the text of our decision, of each party.

cap review.

11. Both of these proposals generally have been the subject of extensive comments submitted in the established pleading cycle as well as in numerous ex parte filings. However, because USTA presented the moving average aspect of its proposal in an ex parte filing submitted late in the proceeding, it was not available for the thorough review and analysis that proposals advanced in the formal comment phase received, although our analysis to date does indicate that it has a number of features that would recommend its adoption. Therefore, pending further comment and analysis of this issue in the further notice in this proceeding, we tentatively conclude that the TFP approach with the moving average advocated by USTA represents a sound method of computing the X-Factor because it is designed to pass through to rate-payers the average efficiency gains achieved by the price cap LECs as a whole, and because it creates incentives for all LECs to surpass the industry average in productivity gains from year to year.

12. With respect to the TFP method, USTA calculates TFP growth as the percentage change in output per unit of input. USTA insists that the calculation of the X-Factor should reflect only the difference between LEC TFP growth and U.S economy TFP growth, and should not include the percentage change in the LECs' input prices, relative to the economy as a whole. Other parties contend that a TFP-based X-Factor must also reflect input price changes over the same period on which the productivity calculation is based. This adjustment would have a significant impact on the calculation of the X-Factor for the period studied by USTA. In addition, several parties criticize USTA's proposed approach because it is based on total company TFP, rather than just interstate productivity gains. Several parties also have raised concerns about the availability and reliability of data needed to compute TFP, and about the determination of a specific method for computing TFP.

13. With respect to the AT&T method, the LECs contend that this approach presents a distorted view of their efficiency performance because their earnings are inflated by regulatory accounting and cost separation rules that do not reflect economic costs. LECs maintain, in particular, that FCC-mandated schedules significantly understate the pace of economic depreciation of their network investment and, consequently, overstate their reported earnings.

14. We believe that the questions raised with respect to the merits of each of these approaches warrant further exploration before we make a final choice of method for setting the X-Factor. Accordingly, we intend promptly to issue a further notice of proposed rulemaking in this proceeding in which we will seek comment on specific issues concerning each of these models

and to invite parties to recommend other models that would meet our objectives. We also intend to seek comment of whether the price cap plan adopted at the end of the further notice proceeding should establish at least two X-Factor options in order to account for the variations in performance among LECs under price cap regulation.

15. The parties to this proceeding also devoted considerable attention in their comments and ex parte submissions to the issue of sharing. The Commission recognized in adopting the original LEC price cap plan that the sharing mechanism could reduce the incentives of LECs to increase their economic efficiency, in the same way that rate-of-return regulation discourages such efforts -- by limiting the effective earnings the LECs may retain through increased productivity. Nevertheless, the Commission decided to impose the mechanism as a "backstop" against the possibility that the X-Factor selected for the LECs proved to be an inaccurate measure of their productivity growth rate, either for the industry as a whole or for individual LECs.

16. Based on our experience over the initial four years of LEC price cap regulation and the extensive record developed in this proceeding, we conclude that the sharing mechanism is not essential to ensuring that LEC rates under price cap regulation remain just and reasonable. We can fulfill our duty to ensure that rates are just and reasonable in many ways, and the record suggests that a plan that captures for consumers the difference between the rate of cost change in the economy as a whole and the rate of change in the cost per unit of output for LECs under price cap regulation will attain that goal. In calculating a productivity factor that meets this objective, we are mindful of past differences in performance and productivity choices among LECs, that these differences are likely to become more apparent over time, and that not every LEC will be as productive as is the industry on average. We are concerned, however, that sharing may continue to be necessary in a price cap plan that establishes two or more X-Factor options as a means of creating incentives for LECs to reach for higher productivity levels. We intend to invite comment in the next phase of this proceeding on the need to retain sharing in a multiple X-Factor price cap plan, and on the efficacy of possible alternatives to sharing in such a regulatory system.

17. We believe that our decision to develop a more complete record with respect to the appropriate method of calculating the X-Factor and related issues concerning the elimination of sharing requirements is prudent in light of the rapidly changing conditions in the telecommunications industry generally and the local exchange market in particular. The pace of these changes has accelerated significantly since the issuance of the Notice in this docket and may account, in part, for the succession of ex

parte submissions that were filed in this docket after the formal pleading cycle ended. The following are just some of the events that are dramatically altering the contours of the telecommunications industry and the market conditions confronting LECs: the advent of new wireless telecommunications services that may compete directly with the wireline LECs; the efforts of individual LECs to open their markets to competition in exchange for greater pricing flexibility; the restructuring of the telecommunications industry through strategic alliances and mergers; efforts by state regulatory agencies to remove barriers to entry into local telecommunications markets; and Congressional proposals that are directed to expanding competition in local telecommunications and video markets.

18. Our decision to seek further comment on the X-Factor proposals requires us to consider what changes, if any, may be necessary or appropriate to our current plan to ensure just and reasonable interstate access rates during the pendency of the next phase of this proceeding. Based on our review of the LECs' performance over the past four years and the record in this proceeding, we reach three general conclusions. The first is that the initial X-Factor was set lower than our analysis now supports. Second, the sharing mechanism creates perverse incentives and the plan should be designed to encourage as many LECs as possible to elect a no-sharing option. Third, to better reflect the differences in productivity potential among the price cap LECs and increase their incentive to move to higher productivity levels, the current plan should be modified to include a third X-Factor option.

19. We conclude that we should adjust the minimum X-Factor upward to 4.0 percent. This adjustment is necessary to correct an error in our calculation of the current 3.3 percent X-Factor caused by the inclusion of a data point in a study used to establish that factor that we believe does not accurately reflect LEC productivity trends. We also conclude that we should establish two higher options. The current plan includes a higher, optional X-Factor of 4.3 percent, one percentage point above the minimum X-Factor. We have decided not to simply replicate the current arrangement by adjusting the higher X-Factor to 5.0 percent. Instead, we will establish two optional X-Factors at equal intervals above and below that level. The X-Factors thus will be 4.0, 4.7, and 5.3. We believe that establishing the highest X-Factor at 5.3 percent presents a sufficiently challenging target to permit us to eliminate sharing at this option for the interim plan. The upward adjustment above 5.0 percent is appropriate, both as a means of ensuring that consumers continue to pay just and reasonable rates and to pass on to consumers some of the benefits that will derive from the elimination of sharing. We further conclude that creating a middle option of 4.7 percent will serve our goal of establishing X-Factor options that take account of the heterogeneity in the

performance of the LECs under price caps.

20. Our ideal in making these adjustments would be to create a price cap system in which every LEC seeks to maximize its productivity without incurring sharing obligations. The creation of multiple X-Factor options, however, requires tightening of the sharing rules applicable to the lower options. Based on our examination of the existing record, we believe that, for purposes of implementing this interim plan, sharing in a multi-option plan is needed to ensure that the public obtains the greatest possible benefits from LEC efficiency gains. We conclude that the sharing ranges around the lowest option should be narrowed so that only LECs that have lower efficiency growth rates will have an incentive to select that option, while those with higher growth rates will have an incentive to elect the higher options due to lesser or no sharing requirements. Specifically, we conclude that LECs selecting the lowest option of 4.0 will be required to share 50 percent of their earnings from 12.25 percent up to and including 13.25 percent and to share 100 percent of their earnings above 13.25 percent. LECs selecting the middle option of 4.7 percent will be required to share 50 percent of their earnings from 12.25 percent up to and including 16.25 percent and to share 100 percent of their earnings above 16.25 percent. LECs electing either of the lower options will be permitted to make a low-end adjustment if their earnings fall below 10.25 percent in a year. LECs selecting the highest option of 5.3 percent will not incur sharing obligations and will not be entitled to a low-end adjustment.

21. We believe that these revisions to our existing price cap scheme create reasonable choices for the LECs that will encourage them to continue to increase their rate of efficiency growth while we are conducting the next stage of this proceeding.

22. In view of our correction to the methodology used to compute the original X-Factor, we conclude that a corresponding correction to, or reinitialization of, the current price cap indexes of LECs that elected the lower X-Factor of 3.3 percent during the past four years is necessary. Accordingly, we require these LECs to reduce their current indexes by .7 percent for each year in which they elected the lower option, appropriately compounded. Moreover, as explained below, no adjustment is required for a year in which a LEC selected the higher 4.3 percent option.

23. We invited comment in the <u>Notice</u> on whether our current formula for adjusting the price cap index for the Common Line basket should be revised. Based on the comments submitted in this docket, we find merit in the recommendation that we should adopt a "per line" formula for adjusting this index, in lieu of the current balanced 50-50 sharing formula. We conclude, however, that we should not revise the current formula until we

have completed our further rulemaking. Doing so would require LECs to recompute all of their price cap indexes. More significantly, the method that we ultimately select for calculating the X-Factor may obviate the need to apply a price cap index to the Common Line basket, because productivity growth in the services within that basket may be reflected in the X-Factor.

24. We also asked parties to comment on whether our rules governing exogenous costs should be revised in light of our experience over the past four years. We conclude that we should revise the criteria to be applied in determining whether a cost change attributable to a change in accounting rules is eligible for exogenous treatment. We will require LECs to demonstrate that the cost change is beyond their ability to control, is not reflected in the formula used to adjust the price cap indexes, and has an impact on the cash flow of the LEC. We find that this revision will properly exclude from eligibility for exogenous treatment cost changes that result from changes in accounting costs, but otherwise have no economic consequences.

25. Finally, we invited comment in the Notice on a variety of questions concerning the manner in which our current LEC price cap plan should be modified in order to adapt the system to the emergence of competition in local access and exchange telecommunications markets. There is growing evidence that an increasing variety of local telecommunication services is available on a competitive basis. This trend is most pronounced in larger urban areas where new entrants appear to be marketing their transport and other local services to high-volume toll users that offer the most lucrative returns. On the other hand, the competitive access industry is still very small. Our price cap system of regulation must be adaptable to the development of competition in local markets and, where possible, encourage the development of efficient competition. Specifically, we must relax regulatory restraints on LECs in markets as competition develops and a competitive presence is established. At the same time, we must retain the ability to regulate the significant set of services that are still provided on less than a fully competitive basis. As USTA has acknowledged,[5] fundamental issues concerning the manner in which our price cap regime should be modified to address the development of competition should be a central issue in the further notice.

26. We find it appropriate now to expand the lower pricing bands that apply to the service categories within the traffic sensitive and trunking baskets by 5 percent to give the LECs additional downward pricing flexibility without risking predation

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[5] Letter from Mary McDermott, USTA, to Acting Secretary, Commission, January 18, 1995 (January 18 Letter), at 7.

or cross-subsidization. We find that the remainder of the transition issues, such as the standards to be used for evaluating the state of competition in particular markets for purposes of reducing or streamlining regulation, are best handled together with the issues that we have deferred to the further notice and will be similarly deferred.

II. BACKGROUND

27. As we discussed in the Notice,[6] the Commission adopted price cap regulation as a means of both improving common carrier rate regulation and adapting it to the dramatic changes in communications technology, market structures, and services that have occurred over the last few decades. Traditional rate-of-return regulation provides few incentives for carriers to become more innovative and efficient, and encourages cost-shifting by carriers that participate in both competitive and noncompetitive markets.[7] Because rate-of-return regulation sets regulated rates to recover the carrier's expenses plus a reasonable rate of return on invested capital, a carrier can seek to recover some of its costs incurred in competitive markets by assigning those costs to services that are not subject to competitive price constraints. Prevention of cost-shifting among services, between regulated and nonregulated activities, and between regulatory jurisdictions requires elaborate regulatory oversight of all the carrier's costs. Carriers achieving the prescribed rate of return also have little profit incentive to introduce new and innovative services, because they would not be permitted to retain the additional earnings from the new services.

28. Price cap regulation, in contrast, can create profit incentives similar to those in fully competitive markets and generates positive motivations for efficient rates, innovation, productivity growth and accurate cost allocation, while reducing regulatory burdens. The price cap limits are set by the Commission to ensure that rates remain within a zone of reasonableness. Prices are held to a maximum level by the cap, much as they are by the rivalry among companies in competitive markets. The carrier gains the opportunity to earn higher profits by operating more efficiently or by developing new services customers want, not by raising overall prices. This opportunity to increase its profits in turn encourages the carrier to apply its resources in the most efficient manner possible, providing more and better service at lower cost. By

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6 Notice, 9 FCC Rcd at 1688.

7 See, e.g., H. Averch and L. Johnson, Behavior of the Firm Under Regulatory Constraint, 52 Amer. Econ. Rev. 1052 (1962); 2 A.E. Kahn, The Economics of Regulation, ch. 2 (1971); and K.E. Train, Optimal Regulation, ch. 1 (1991).

increasing its productivity, the carrier can increase its profitability.

29. At the same time, customers directly benefit from lower prices and new services that better meet their needs, and indirectly from the lower costs of non-telecommunications goods and services provided by firms that use telecommunications in their business. Customers are also protected from cross-subsidization by the grouping of services in price cap baskets, which prevents a carrier from raising rates in one basket and lowering them in another to the detriment of customers using services in the first basket.[8] Rate bands within the baskets are adjusted annually and protect customers from rapid rate increases by requiring a carrier to make a special showing to raise rates above the level allowed by the applicable rate band.[9] The rate bands also act as a check against predatory pricing by requiring a carrier to justify a rate decrease that exceeds the band limitation.

30. Under the LEC price cap plan,[10] the carriers' interstate services are grouped within four baskets. Rates within each basket are capped based on a formula that limits the maximum percentage rate change to the rate of inflation (measured by the Gross National Product Price Index or GNP-PI) minus an X-Factor that sets a productivity improvement threshold. For the LECs, the X-Factor was set at a minimum of 3.3 percent annually, reflecting studies of historical telephone industry productivity growth and a Consumer Productivity Dividend of 0.5 percent.[11] The price cap formula is also adjusted for a limited set of exogenous cost changes, generally those caused by changes in administrative, legislative, or judicial action beyond the carrier's control and not otherwise reflected in price cap

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[8] Section 61.42(d)-(g) of the Commission's Rules, 47 C.F.R. §61.42(d)-(g).

[9] Section 61.47 of the Commission's Rules, 47 C.F.R. §61.47.

[10] The price cap rules are codified at Sections 61.41-61.49 of the Commission's Rules, 47 C.F.R. §§61.41-61.49. See also Section 61.1(c), 47 C.F.R. §61.1(c).

[11] The 3.3 percent minimum X-Factor applies to the three access service baskets. For the Interexchange basket, the X-Factor was set at 3.0 percent to match the factor established for AT&T's interexchange services, and was not based on the studies used to set the X-Factor for the other LEC baskets.

calculations.[12] This formula produces the Price Cap Index (PCI) for the basket. Within a basket, rate changes in any one year may also be limited by rate bands, computed for a designated service category around a subindex, called the Service Band Index (SBI).[13]

31. Rate changes that conform to the limits set by a LEC's PCIs and SBIs are presumed lawful and permitted to take effect under streamlined review and on 14 days' notice. Should a LEC decide to file rates outside the PCI or SBI limits, the price cap rules call for more rigorous scrutiny. More extensive cost documentation must be filed, the presumption of lawfulness is removed, and longer notice periods apply. Above-cap and above-band filings carry a heavy burden of justification and strong likelihood of suspension. For new services that will be subject to price caps, the carrier must submit a study of projected costs or net revenue effects.[14]

32. In contrast to the pure price cap plan adopted for AT&T, the Commission adopted a hybrid plan for the LECs, which retained features of rate-of-return regulation. The rate-of-return "backstop" was intended to compensate for the possibility of inaccuracy in our calculation of the X-Factor and for variations among the different LECs. Under the backstop sharing mechanism, if a LEC elects the minimum 3.3 percent X-Factor, thus reducing its rates by 3.3 percent annually after adjustment for inflation and exogenous cost changes, it is allowed to retain all earnings up to 12.25 percent, and half of all higher earnings up to 16.25 percent. All earnings above 16.25 percent return to ratepayers through adjustments to the PCIs in the following year. Alternatively, LECs may elect a more challenging 4.3 percent X-Factor, and earn the right to retain all earnings up to 13.25 percent and half of all higher earnings up to 17.25 percent. All earnings over 17.25 percent return to ratepayers, once again through adjustments to the PCIs in the following year. Conversely, under the low-end adjustment mechanism, if a LEC's earnings fall below 10.25 percent in any calendar year, the LEC is granted an automatic one year upward adjustment in its PCI in the next year, sufficient to bring its earnings back up to 10.25 percent. The rate-of-return thresholds in the sharing and low-end adjustment mechanisms were adopted in conjunction with the Commission's prescription of 11.25 percent as a reasonable target

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[12] Section 61.45(d)(1) of the Commission's Rules, 47 C.F.R. § 61.45(d)(1).

[13] Section 61.47 of the Commission's Rules, 47 C.F.R. §61.47.

[14] Section 61.49(b) of the Commission's Rules, 47 C.F.R. §61.49(b).

for rate-of-return carriers beginning in 1990.

33. The LEC price cap plan is mandatory for the largest LECs, the seven Regional Bell Operating Companies (RBOCs) and GTE. It is optional for other LECs. If a company elects price caps, all of its affiliated companies, with the exception of any average schedule affiliates, must also become price cap carriers.[15] Those LECs electing price caps include United Telephone, Rochester Telephone, The Lincoln Telephone and Telegraph Company, and Southern New England Telephone.[16]

34. Although the LEC price cap plan was intended to remain relatively stable during its first four years, changes in the plan have been made in response to related regulatory changes, judicial decisions, and technological advances. In the Second Transport Order, the Commission modified the LEC price cap basket and service category structure, as well as the pricing bands applicable to the service categories, to complement the Commission's restructuring of the LECs' local transport rates.[17] Also, after adopting rules that permit the LECs to offer video dialtone service and after concluding that video dialtone service offerings by price cap LECs would be subject to the existing price cap rules, the Commission recently proposed establishing a separate price cap basket for video dialtone services.[18]

35. Some aspects of the rules have required interpretation or amendment. The rules for calculating earnings for purposes of applying the backstop mechanisms did not state whether the effects of a sharing or low-end adjustment resulting from the prior year's earnings should be eliminated from the calculation of the current year's earnings. This ambiguity in the rules gave

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[15] LEC Price Cap Order, 5 FCC Rcd at 6819-21. This "all or nothing" rule eliminates the possibility that a price cap LEC could shift costs to an affiliate that remained under rate-of return-regulation.

[16] Notice, 9 FCC Rcd at 1689.

[17] Transport Rate Structure and Pricing, CC Docket No. 91-213, 9 FCC Rcd 615, 615-16 (1994) (Second Transport Order).

[18] Price Cap Performance Review for Local Exchange Carriers; Treatment of Video Dialtone Services Under Price Cap Regulation, CC Docket No. 94-1, FCC 95-49 (released Feb. 15, 1995); see also id. at para. 12 (the Commission also requested comment on whether a new price cap basket should be established that would include not only video dialtone services, but also other broadband, transport-related services).

rise to investigations of several price cap tariff filings[19] and required us to adopt a new rule explicitly incorporating a prospective "add-back" requirement for purposes of calculating the earnings used to determine the sharing and low-end adjustments under the LEC price cap plan.[20] Further, the Commission's decision to deny exogenous cost treatment for the LECs' cost changes resulting from a change in generally accepted accounting practices (GAAP) for employee postretirement liabilities other than pensions (commonly known as "other postretirement employee benefits" or "OPEBs")[21] was found to be arbitrary and capricious by the United States Court of Appeals for the District of Columbia Circuit.[22]

36. In addition to revising the LEC price cap rules, the Commission has enhanced its monitoring of the LECs' service quality and infrastructure reporting requirements. In the LEC Price Cap Order, the Commission decided to significantly expand the monitoring of service quality and infrastructure development to assure the availability of high-quality, innovative communications services, and the development of the

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[19] 1993 Annual Access Tariff Filings, CC Docket, No. 93-193, National Exchange Carrier Association, Transmittal No. 556, Universal Service Fund and Lifeline Assistance Rates, CC Docket No. 93-123, GSF Order Compliance Filings, Bell Operating Companies Tariffs for the 800 Service Management System and 800 Data Base Access Tariffs, CC Docket No. 93-129, Memorandum Opinion and Order Suspending Rates and Designating Issues for Investigation, 8 FCC Rcd 4960 (Com.Car.Bur. 1993).

[20] Price Cap Regulation of Local Exchange Carriers; Rate-of-Return Sharing and Lower Formula Adjustment, CC Docket No. 93-179, FCC 95-47 (adopted Mar. 30, 1995). The add-back rule requires price cap LECs to eliminate the effects of sharing or low-end adjustments required by the prior year's earnings on the current year's earnings. The current year's earnings, thus adjusted, determine whether sharing is required, or a low-end adjustment is permitted, in the next tariff year. Id.

[21] Treatment of Local Exchange Carrier Tariffs Implementing Statement of Financial Accounting Standards, "Employers Accounting for Postretirement Benefits Other than Pensions", CC Docket No. 92-101, 8 FCC Rcd 1024 (1993) (OPEBs Order).

[22] Southwestern Bell Telephone Company v. FCC, 28 F.3d 165 (D.C. Cir. 1994); see also id. (the Court remanded to the Commission to consider the LECs' request for exogenous cost treatment for their incremental costs resulting from the mandated accounting change in a manner consistent with the court's opinion and the LEC Price Cap Order and LEC Price Cap Reconsideration Order).

telecommunications infrastructure needed to provide these services.[23] In particular, the Commission determined that all price cap LECs would be required to file quarterly service quality reports, and that mandatory price cap LECs would also be required to file semi-annual service quality reports and annual infrastructure reports.[24] Under delegated authority, the Common Carrier Bureau established specific service quality and infrastructure reporting requirements[25] that "balance the need for data that will accurately reflect trends in service quality and infrastructure development with our goal of minimizing the administrative costs of LECs."[26]

37. In Part III.A. of this Report and Order, below, we report and analyze the results of the first four years of the LEC price cap program. Part III.B. addresses the broad policy goals of price caps. In Part IV we discuss, and adopt interim changes to, core features of the price caps rate formula: the productivity factor (IV.B.) and the rate of return backstop mechanisms (IV.C.). We also adopt a one-time rate decrease to correct for previous errors in the calculation of the productivity factor (IV.D.). Part V addresses other matters that we identified as "baseline" issues in the Notice: the common line formula (V.A.); exogenous cost adjustments (V.B); sales and swaps of exchanges (V.C.); equalization of regulations for LECs and CAPs (V.D.); the inflation measure used in the price cap formula (V.E); and service quality, infrastructure monitoring, and network reliability (V.F.). Part VI addresses transition issues: reducing or streamlining regulation; revising baskets; basket and band flexibility; and rates and regulations for new services.

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[23] LEC Price Cap Order, 5 FCC Rcd at 6827, 6829.

[24] LEC Price Cap Order, 5 FCC Rcd at 6827-39.

[25] See Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Memorandum Opinion and Order, 6 FCC Rcd 2974 (Com.Car.Bur. 1991) (Service Quality Order), modified, 6 FCC Rcd 4819 (Com.Car.Bur. 1991), further modified, Public Notice, Adjustments to Price Cap Carriers' Service Quality and Infrastructure Reports in ARMIS, 7 FCC Rcd 3590 (released Mar. 31, 1992), further modified, Public Notice, Modifications to Service Quality Infrastructure Reporting, 7 FCC Rcd 4632 (released July 7, 1992), modified, Public Notice, ARMIS Filing Requirements, 7 FCC Rcd 8795 (Com.Car.Bur., released Dec. 15, 1992) and Erratum, DA 92-1696 (Com.Car.Bur.; released Dec. 18, 1992), further modified, 8 FCC Rcd 7259 (Com.Car.Bur. 1993) (Modified Service Quality Order).

[26] Service Quality Order, 6 FCC Rcd at 2976.

III. GENERAL ISSUES

38. In this section, we discuss the two general issues raised in the Notice, the effects of price caps on consumer welfare and the economy, and whether the Commission should revise the overall goals of the LEC price cap plan to better serve the public interest.

A. Effects of the LEC Price Cap Plan

1. Background

39. In the Notice, the Commission summarized data gathered in monitoring LEC performance under the first three years of price caps.[27] For example, the Notice indicated that no price cap LECs had requested above-cap rates, and that LEC interstate access rates were $1.5 billion lower than rates existing at the time price caps were instituted. LEC returns, on the other hand, increased, from the target rate of return of 11.25 percent when LEC price caps took effect in January 1991 to an average of 12.25 percent in 1992.[28]

40. Monitoring data for the first three years of LEC price caps indicated that service quality under price caps was similar to levels under rate-of-return regulation. Residential customer service quality complaints, however, had increased during 1991 and had remained high through the first quarter[29] of 1993. The Notice observed that the major network service outages that occurred during the three-year period did not appear to be directly traceable to price cap regulation or to any strategy to maximize short-term profits by reducing maintenance expenses, but rather were mainly the result of fiber cable cuts caused by construction activity.[30]

41. We also observed in the Notice that the deployment of a technologically improved infrastructure appeared to accelerate under price caps, as price cap LECs increased the pace of digital switch upgrades, Integrated Services Digital Network (ISDN) lines, Signalling System 7 (SS7) capability, and fiber optic transmission facilities. In addition to services ordered by the Commission, such as Open Network Architecture and 800 Database,

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[27] Notice, 9 FCC Rcd at 1691.

[28] See id., and sources cited therein.

[29] Notice at 1691.

[30] The specific reasons behind these construction-related fiber cuts are currently being studied. Id.

the LECs introduced a range of new services under price cap regulation.[31]

42. Subscribership levels also improved during the initial price cap period, rising from 93.3 percent of households in 1990 to 94.2 percent in July of 1993.[32] The Notice pointed out, however, that the percentage of households subscribing to telephone service varies, inter alia, by state, the householder's race, family income, and in areas such as Indian reservations, highlighting the continuing issue of whether all Americans have an opportunity to use telephone service at affordable rates.[33]

43. In General Issue 2, the Commission sought further information on the effects of the price cap plan, including quantitative effects of the plan on consumer welfare, the economy, and the creation of jobs both in telecommunications and in other sectors of the economy. We sought data and analysis on how the plan would effect growth in telecommunications markets, revenues, profits by LECs and CAPs, competition in local exchange and access services, competition in interexchange services, and levels of demand for telecommunication services. We also requested similar analyses of the effects of possible revisions to the current plan.[34]

2. Comments

44. USTA states in its initial comments that as of 1993, on a compounded basis, consumers "gained over $2.9 billion through the price cap formula, plus an additional $564 million as a result of LEC pricing below the cap," compared to what consumers would have paid if the rates in effect at the onset of price caps had remained the same during that time period.[35] SWB claims that, by the end of 1994, the effects of the total price declines by price cap LECs will have accounted for over $5 billion in reduced customers' bills, using the same benchmark.[36] According to SWB, by the end of 1994, consumer benefits from LECs electing the 4.3 percent productivity offset will be approximately $250

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[31] These new services included electronic directory assistance, access to the Common Channel Signalling system, and upgraded fiber optic services. Notice, 9 FCC Rcd at 1691-92.

[32] Notice, 9 FCC Rcd at 1691.

[33] Id.

[34] Notice, 9 FCC Rcd at 1693 (General Issue 2).

[35] USTA Comments at 15 (footnote omitted).

[36] SWB Comments at 14.

million.[37] SWB states that LEC interstate switched access prices have declined by 13 percent under price cap regulation while output prices in the general economy rose by over 12 percent in the same period, for a decline of over 25 percent relative to inflation.[38]

45. Additional data requested by Commission staff was submitted by USTA on October 18, 1994 and updated on December 2, 1994, February 14 and 28, 1995 and on March 17, 1995. USTA provided data on the actual price indexes (APIs), PCIs, and rates of return for the price cap LECs, as well as rate impacts by year on price cap baskets, sharing amounts, low-end adjustment formula amounts, and exogenous costs. Selected data from the USTA submissions can be found in Appendix C, Table 6.

46. USTA's response to our data request shows that, compared to rates in effect immediately prior to initial price cap rates, rates in effect as of July 1994 were lower by about $2.12 billion on an annual basis. Of this amount, decreases due to the net effect of exogenous adjustments other than sharing and the lower formula adjustment mechanism are $996 million;[39] decreases due to below-cap pricing are $570 million; and decreases due to the net amount of sharing and the lower formula adjustment mechanism are $155 million. The remainder of the decreases, approximately $399 million, are due to the net effect of inflation, the productivity offsets actually selected, and the effect of traffic growth on the calculation of the carrier common line per minute rates.

47. Sprint also analyzed the revenue effects of price cap regulation. According to Sprint, the rate reduction from the beginning of price cap regulation through 1994 was $1.87 billion.

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[37] SWB Comments at 15. In the first year of price caps, 1991, only one major LEC, PacTel, elected the 4.3 per cent productivity factor. In later years the following LECs elected the higher productivity factor: BellSouth and US West in 1992; and US West, Rochester and PacTel (Nevada)in 1993 and 1994. Some United and Centel jurisdictions also elected the higher figure in various years. Four of the seven RBOCs and GTE have never elected the 4.3 per cent productivity factor.

[38] SWB Comments at 13-14.

[39] For the most part the decreases from the net effect of exogenous adjustments are the result of the subscriber plant factor, the amortization of inside wiring, NECA long-term and transitional support, the reserve deficiency allowance and the represcription of the rate of return from 12 to 11.25 per cent (see December 2, 1994 USTA response to data request, Table 12), events which are not likely to recur.

48. BellSouth asserts that the IXCs have not passed on the savings they have received from lower interstate exchange access charges to end-users. It claims that long distance rates, based on the average price per minute for basic service, as compiled by the Bureau of Labor Statistics (BLS), have increased since the inception of price cap regulation.[40] Customers for Access Rate Equity (CARE)[41] disputes BellSouth's assertion. It says that interstate long distance rates have fallen further under price caps than interstate exchange access rates have fallen.[42] It explains that the BLS figures do not reflect the pricing plans, discounts and promotions offered by the IXCs and widely purchased by their customers.[43] AT&T states that, because the long distance market is competitive, access cost reductions to long distance companies are passed along to consumers. It further points out that it is required by Section 61.44(b) of the Commission's Rules[44] to flow through access reductions to customers of its price cap regulated services.[45] Sprint also states that LEC access rate reductions have been passed on to its customers, the ultimate consumers.[46] In response, Bell Atlantic hired a market research firm which conducted a survey of 7431 end users, and found that about 30.8 percent of those end users used a discount plan.[47] AT&T replies that over 40 percent of its customers are on discount calling plans.[48]

49. MFS states that the LEC price cap plan has worked reasonably well in controlling the overall level of LEC prices

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[40] BellSouth December 8, 1994, ex parte filing; BellSouth January 20, 1995 ex parte filing; BellSouth February 10, 1995, ex parte filing; BellSouth March 23, 1995, ex parte filing.

[41] CARE is a coalition created to work for LEC price cap reform consisting of: Ad Hoc; API; AT&T; Consumer Federation of America; CompTel; ICA; MCI; National Association of State Utility Consumer Advocates; and Wiltel.

[42] CARE December 22, 1994, ex parte filing. See also MCI January 3, 1995, ex parte filing.

[43] CARE December 22, 1994, ex parte filing.

[44] 47 C.F.R. § 61.44(b).

[45] AT&T February 2, 1995, ex parte filing; AT&T February 3, 1995, ex parte filing.

[46] Sprint September 14, 1994, ex parte filing.

[47] Bell Atlantic March 23, 1995, ex parte filing.

[48] AT&T March 23, 1995, ex parte filing.

and earnings. MFS adds, however, that the price cap plan has been much less effective in regulating the LECs' rate structures, with the result that the benefits of incentive regulation have been very unevenly distributed.[49] AT&T notes that we stated in the Notice that LEC price caps has resulted in interstate access rates $1.5 billion lower than at the inception of the LEC price cap plan, but argues that the full potential benefit to the economy will not be realized unless price cap regulation reduces interstate access charges to more competitive levels.[50] In contrast to these arguments, WilTel and CCTA contend that price cap regulation has not resulted in lower prices, or improved consumer welfare or economic development, compared to what would have occurred in a rate-of-return environment.[51] CCTA cites LEC comments that attribute a significant portion of rate reductions to competitive forces and prevailing economic conditions in support of its position that any rate reductions are not attributable to the institution of price cap regulation.[52] Wiltel bases its claim on interest rate declines that were not captured by the price cap system and the declining costs experienced due to new technology, both of which the Commission could have required the LECs to flow through to customers under rate-of-return regulation.[53]

50. Ad Hoc, a coalition of local exchange access users, claims that it is impossible to show that there has been a direct and causal link between telecommunications investment and economic growth, based on a submitted analysis by Economics and Technology, Inc. (ETI).[54] Pac Bell asserts that ETI's analyses do not support Ad Hoc's claim because inter alia they are based on models that are outdated and that inappropriately combine various types of telecommunications investment.[55] SWB asserts that ETI's study overstates LEC total factor productivity, and that ETI bases its study on an unreasonably small sample of study areas.[56]

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49 MFS Comments at 2.

50 AT&T Comments at i, 4, citing Notice, 9 FCC Rcd at 1691.

51 WilTel Comments at 5; CCTA Reply at 9.

52 CCTA Reply at 8-9.

53 Wiltel Comments at 5-6.

54 Ad Hoc Comments at 6-10 and Attachment A.

55 Pac Bell Reply at 6-7.

56 SWB Reply at 42-44.

51. MCI believes that price cap regulation will deliver the maximum benefits to the economy only if it requires LECs to move prices toward economic cost. MCI asserts that, because the Commission was conservative in its selection of a productivity factor, the LECs priced services at artificially high levels, thereby depressing the effects lower rates would have had on the economy.[57]

52. USTA commissioned the WEFA Group (WEFA) to conduct a study of price cap regulation.[58] USTA says that, according to the WEFA study, adoption of USTA's proposed revisions to the price cap plan[59] would produce 500,000 jobs, GDP would be $60.5 billion higher by 2004, inflation would be 0.15 percent lower each year, the balance of trade would improve by a cumulative $16 billion over ten years, and the federal budget deficit would be lower by a cumulative $149 billion over ten years, compared to continuation of the current price cap plan.[60] Ad Hoc and MCI interpret WEFA's study as an unsupported promise that LECs would increase investment if rates were increased.[61] Ad Hoc also claims the WEFA study improperly assumes that all network investment would be equally productive, and fails to discuss the effect on the economy if the funds used for incremental investments had instead been used to lower rates.[62]

53. With regard to infrastructure improvement, SWB states that, during the first three years under price caps, the price cap LECs invested approximately $60 billion in property, plant, and equipment.[63] US West reports that it has decreased prices approximately $310 million under price caps; that it has invested $6.7 billion in infrastructure, an average increase of more than

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[57] MCI Comments at 10.

[58] USTA Comments, Attachment 7.

[59] The USTA proposal originally recommended, among other things, a three-tier regulatory system, which would create Initial Market Areas (IMAs), Transitional Market Areas (TMAs), and Competitive Market Areas (CMAs) for each LEC, and apply different regulations to each type of area. USTA Comments at 58-66. USTA has revised its recommendation on several occasions since it filed its comments. The various versions of the USTA proposal are discussed in detail below.

[60] USTA Comments at 97.

[61] Ad Hoc Reply at 6; MCI Reply at 11-12.

[62] Ad Hoc Reply at 5-6.

[63] SWB Comments at 16.

12 percent from 1990's capital expenditures; and that it has spent $0.8 billion upgrading 534 offices with digital switches and providing one-party service in rural areas.[64] US West says that it had a 103 percent increase in fiber sheath kilometers from 1989-1992.[65] NYNEX states that the number of strand miles of fiber in its network doubled during the first three years of price caps. GTE states that, between 1989 and the end of 1993, the total sheath kilometers of fiber in its network increased 84.67 percent.[66] Ameritech asserts that, under price caps, its total fiber miles have more than tripled.[67] Pac Bell states that its deployment rate for fiber under price cap regulation has equaled or exceeded its fiber deployment before price cap regulation and that, over the same period, the deployment of copper gradually diminished.[68] BellSouth notes that it has added approximately 511,000 fiber miles for a total of over 1.1 million miles.[69]

54. Pac Bell states that under price caps, it began deployment of High Bit Rate Digital Subscriber Line (HDSL) service. Pac Bell states that ten percent of Nevada Bell's high-capacity circuits to end users are on HDSL.[70] GTE says that, since 1989, it has deployed 1,819 digital switches.[71] Ameritech asserts that, under price caps, the percent of customers served by digital lines has doubled.[72] GTE, Ameritech and BellSouth each state that it has increased significantly the number of switches equipped with ISDN capabilities and interLATA and intraLATA SS7 functionality.[73]

55. USTA's response to our data request states that ARMIS

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[64] US West Comments at 3.

[65] US West Comments at 29.

[66] GTE Comments at 15.

[67] Ameritech Comments at 7.

[68] Pac Bell Comments at 23.

[69] BellSouth Comments at 17.

[70] Pac Bell Comments at 23.

[71] GTE Comments at 15-16.

[72] Ameritech Comments at 7.

[73] GTE Comments at 15-16; Ameritech Comments at 7; BellSouth Comments at 17.